

## ABSTRACT

A power supply system has redundant regulated power supplies, whose output ports are diode-ORed to an output node. One of the power supplies outputs a regulated output  
5 voltage that is sufficient to meet current demand of a load coupled to the output node. Each power supply has an associated monitoring circuit that monitors the voltage drop across its OR-ing diode. The monitoring circuit for a non-dominant power supply controls its operation so that  
10 the non-dominant supply provides a reduced current through its diode to the output node that is less than the current demand of the load, but sufficient to forward bias the diode, and thereby enable the non-dominant supply to immediately respond to a load change, such as an  
15 interruption in the operation of the dominant power supply.